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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,085	03/16/2000	Shmuel Shaffer	CISCP141	1922

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EXAMINER

DINH, KHANH Q

ART UNIT	PAPER NUMBER
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2151

12

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/527,085

Applicant(s)

SHAFFER ET AL.

Examiner

Khanh Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-8 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 11-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This is in response to the Request for Reconsideration filed on 2/12/2004 (paper #11). Claims 1, 3-8 and 11-23 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5-8 and 11-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Perkins et al., US pat. No.6,496,477.

As to claim 1, Perkins discloses a method for replicating a plurality of original packets in a packet flow received by a first device (source 103 fig.1), the packet flow following a first routing path (119 fig.1) which includes a first device (103 fig.1), the method comprising:

receiving a request from a second device (destination 105 fig.1) for connecting with the first device (103 fig.1), the request identified at least one predetermined criterion (a balance or optimization of temporally-diversity packets) and connecting the first device with the second device in response to the request (launching packets and

dependent packets as plural flows along plural paths from the first device to the second device, see fig.1, col.5 line 38 to col.6 line 57).

receiving the packet flow with a first device, the first device (103 fig.1) being included in the first routing path (119 fig.1).

in the first device, identifying the original packets in the packet flow according to at least one predetermined criterion (i.e., using reference numeral "i" associated with destination 105 of fig.1) and generating replicate packets (replicating VoIP packets or duplicate packets, see fig.10, col.5 lines 38-57 and col.23 line 35 to col.24 line 48) corresponding to the original packets (forwarding data packet streams to the destination, see fig.1, abstract, col.6 line 18 to col.7 line 50, col.8 line 16 to col.9 line 49 and col.29 line 2 to col.30 line 67).

transmitting the original packets from the first device along the first routing path (119 fig.1) and transmitting the replicate packets from the first device along a second routing path (117 fig.1) the second routing path being different from the first routing path (i.e., forwarding two different data streams, col.8 line 16 to col.9 line 49 and col.15 line 67 to col.16 line 59).

As to claim 5, Perkins that the destination device being included in the first routing path, the first device transmitting the original packets to the destination device via the first routing path (119 fig.1), the second device (105 fig.1) facilitating transmission of the replicate packets to the destination device via the second routing path (117 fig.1)

(forwarding second data stream to the same destination 105 of fig.1, see col.8 line 16 to col.9 line 49).

As to claim 6, Perkins discloses a test device for facilitating inspection of the replicate packets (i.e., replicating VoIP packets, see fig.10, col.23 line 35 to col.24 line 53 and col.27 lines 8-45).

As to claim 7, Perkins discloses that each of the original packets indicate one of a plurality of destination devices each of the destination devices being logically connected with the first device via a protocol, a first one of the destination devices being included in to the first routing path (117 fig.1), a second one of destination devices being included in the second routing path (119 fig.1), and wherein the replicate packets are transmitted along the second routing path to the second one of the destination devices (see col.8 line 16 to col.9 line 49 and col.23 line 35 to col.24 line 5).

As to claim 8, Perkins discloses determining which of the original and replicate packets reach their respective destination devices first, thereby identifying a winner destination device and awarding a connection to an originating device to the winner destination device (i.e., selecting paths through a list, tables and algorithm, see col.11 line 20 to col.12 line 62 and col.14 line 43 to col.15 line 51).

As to claims 11 and 12, Perkins discloses the original packets originate from a source and destination device, the method for replicating the original packets being transparent to the source and destination device (see fig.20, col.6 line 18 to col.7 line 50 and col.30 line 5 to col.31 line 30).

As to claims 13-15, Perkins discloses first device comprising a router, the at least one predetermined criterion comprises a source address and destination address (see fig.10, col.23 line 35 to col.24 line 53).

As to claims 16-18, Perkins discloses a socket, a port and at least one predetermined criterion comprising a protocol type (see fig.1, col.4 lines 39-67 and col.6 line 18 to col.7 line 50).

Claim 19 is rejected for the same reasons set forth in claim 1.

As to claims 20, 21 and 23, Perkins discloses a router operable to replicate a plurality of original packets in a packet flow received by a processing device, the packet flow following a first routing path which includes a processing device, the router comprising:

a memory having at least a portion of a router (103 fig.1) operating system stored therein and a processor (164.1 fig.1) for controlling operation of the router according to the router operating system, the processor being configured by the router operating system to:

receiving a request from a second device (destination 105 fig.1) for connecting with the first device (103 fig.1), the request identified at least one predetermined criterion and connecting the first device with the second device in response to the request (launching packets and as plural flows along plural paths, see fig.1, col.5 line 38 to col.6 line 57).

receive the packet flow with the router and identify the original packets in the packet flow according to at least one predetermined criterion (i.e., using reference numeral "i" associated with destination 105 of fig.1) and generating replicate packets corresponding to the original packets (forwarding data streams to the destination, see fig.1, abstract, col.6 line 18 to col.7 line 50 and col.8 line 16 to col.9 line 49).

transmit the original packets from the router along the first routing path (119 fig.1) and transmit the replicate packets (i.e., replicating VoIP packets, see fig.10, col.23 line 35 to col.24 line 53 and col.27 lines 8-45) from the router along a second routing path (117 fig.1), the second routing path being different from the first routing path and including the requesting device (i.e., forwarding two different data streams, col.8 line 16 to col.9 line 49 and col.15 line 67 to col.16 line 59).

As to claim 22, Perkins discloses a method for remotely monitoring a portion of a packet flow associated with a first device (103 fig.1) using a second device (105 fig.1), the packet flow following a first routing path (117 fig.1), the method comprising:

receiving a request from the second device (105 fig.1) for connecting with the first device (103 fig.1) via a protocol and logically connecting with the second device via the protocol:

receiving the packet flow with the first device (103 fig.1), the first device being included in the first routing path and identifying original packets in the packet flow according to at least one predetermined criterion (i.e., implementing a balance or optimization of temporally-diversity packets and further using reference numeral "i" associated with destination 105 of fig.1) and generating replicate packets (i.e., replicating VoIP packets, see fig.10, col.23 line 35 to col.24 line 53 and col.27 lines 8-45) corresponding to the original packets (forwarding data streams to the destination, see fig.1, abstract, col.5 lines 3-57, col.6 line 18 to col.7 line 50 and col.8 line 16 to col.9 line 49).

transmitting the original packets from the first device along the first routing path and transmitting the replicate packets (i.e., replicating VoIP packets, see fig.10, col.23 line 35 to col.24 line 53 and col.27 lines 8-45) from the first device to the second device along a second routing path, the second routing path being different from the first routing path (i.e., forwarding two different data streams, col.8 line 16 to col.9 line 49 and col.15 line 67 to col.16 line 59).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins et al US pat. No.6,496,477 in view of Kirsch US pat. No.5,751,956.

Perkins' teachings still as in item 3 above. Perkins does not specifically disclose a packet redirection protocol and an object caching protocol. However, Kirsch discloses a packet redirection protocol and an object caching protocol (see abstract, fig.2, col.5 lines 24-59 and col.6 line 32 to col.7 line 59). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Kirsch's teachings into the computer system of Perkins to service request from server because it would have reliably tracked and redirected hyper-link references to external server systems.

### ***Response to Arguments***

6. Applicant's arguments filed on 2/12/2004 have been fully considered but they are not persuasive.

Applicant asserts that the cited reference does not disclose "the request identifying at least one predetermined criterion and receiving the packet flow with the first device".

*\* Examiner respectfully disagrees. Perkins discloses a process for sending data packets (real time data information packets) from a sender computer (105 fig.1) to a receiver computer (103 fig.1) using many types of network communication links. The*

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*data packets includes one predetermined criterion [using path diversity which can be optimized for quality, price, service in a network communications and providing a satisfactory Quality of Service by permitting the destination device to construct lost packets (taking VoIP or VOP for example) from the source device] ” (see fig.1, abstract, col.5 lines 3-57, col.6 line 18 to col.7 line 50 and col.8 line 16 to col.9 line 49).*

*Furthermore, Perkins discloses implementing a balance or optimization of temporally-diversity packets by reconstruct a semblance of the lost packet depending on the information was lost, using reference numeral “i” associated with destination (105 of fig.1). Therefore, the examiner asserts that cited prior art teaches or suggests the subject matter broadly recited in independent claims 1, 19-23.*

### **Conclusion**

7. Claims 1, 3-8 and 11-23 are rejected.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (703) 308-8528. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached on (703) 305-4712. The fax phone number for this group is (703) 872-9306.

*A shortened statutory period for reply is set to expire THREE months from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned (35 U.S. C . Sect. 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(A).*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 -9600.



**FRANTZ B. JEAN**  
**PRIMARY EXAMINER**

Khanh Dinh  
Art Unit 2151  
Patent Examiner  
4/26/2004